

CLAIMS

What is claimed is:

1 1. A plate cylinder for carrying a printing plate in a printing press, said
2 printing plate having a leading plate end and a trailing plate end, said cylinder
3 comprising:

4 a cylinder body having an axis;

5 a tensioning channel extending in an axial direction in said cylinder body,
6 said channel having a contact surface which said leading plate end can bear against;
7 and

8 a tensioning rail in said channel, said tensioning rail carrying a holding
9 element and being movable transversely to said axial direction between an extended
10 position, where said trailing plate end can be hooked on said rail after said leading plate
11 end has been placed in said channel and said cylinder has been rotated, and a drawn-in
12 position, where said holding element fixes said leading plate end against said contact
13 surface and trailing plate end is tensioned.

1 2. A plate cylinder as in claim 1 further comprising at least one spring
2 element which loads said tensioning rail toward said drawn-in position.

1 3. A plate cylinder as in claim 1 further comprising a push rod which is
2 displaceable in said axial direction and has cam surfaces which are effective to move
3 said tensioning rail between said positions as said push rod is moved axially.

1 4. A plate cylinder as in claim 3 further comprising at least one
2 plunger positioned between said push rod and said tensioning rail, said cam surfaces
3 acting on said plungers to move said tensioning rail.

1 5. A plate cylinder as in claim 3 wherein said contact surface of said
2 tensioning channel is configured to cooperate with a leading plate end configured with
3 an angled-over edge, and said tensioning rail is configured to cooperate with a trailing
4 plate end having a double angled-over edge.

1 6. A plate cylinder as in claim 3 further comprising an adjusting device
2 for displacing said push rod, said adjusting device having one of a pneumatic drive and
3 a hydraulic drive.

1 7. A plate cylinder as in claim 3 wherein said push rod has one end
2 which can be connected to said adjusting device, and another end which is supported in
3 said cylinder body by a spring element.

1 8. A plate cylinder as in claim 1 wherein said tensioning rail, in said
2 extended position, lies within said cylinder body.

1 9. A plate cylinder as in claim 1 wherein said holding element is a
2 shaped leaf spring.

1 10. A plate cylinder as in claim 4 wherein said cylinder body has a cut-
2 out which accommodates said tensioning rail, said plunger, and said push rod, said
3 plate cylinder further comprising:

4 a filler piece which closes said cut-out adjacent to said push rod, and
5 a filler piece which defines the size and shape of said tensioning channel.

1 11. A plate cylinder as in claim 3 further comprising an end from which
2 said push rod can be actuated.

1 12. A plate cylinder as in claim 11 further comprising a clamping device
2 accommodated in said tensioning channel, said tensioning rail and said holding element
3 being fixed to said clamping device.

1 13. A plate cylinder for carrying at least two printing plates in a printing
2 press, each said printing plate having a leading plate end and a trailing plate end, said
3 cylinder comprising:

4 a cylinder body having an axis;
5 at least two tensioning rails for respective said printing plates, each said
6 tensioning rail being movable between a tensioning position, where the respective
7 printing plate is tensioned on said cylinder body; and a release position, where the
8 respective printing plate can be released from the cylinder body; and

9 at least one movement mechanism for activating said tensioning rails
10 independently of one another.